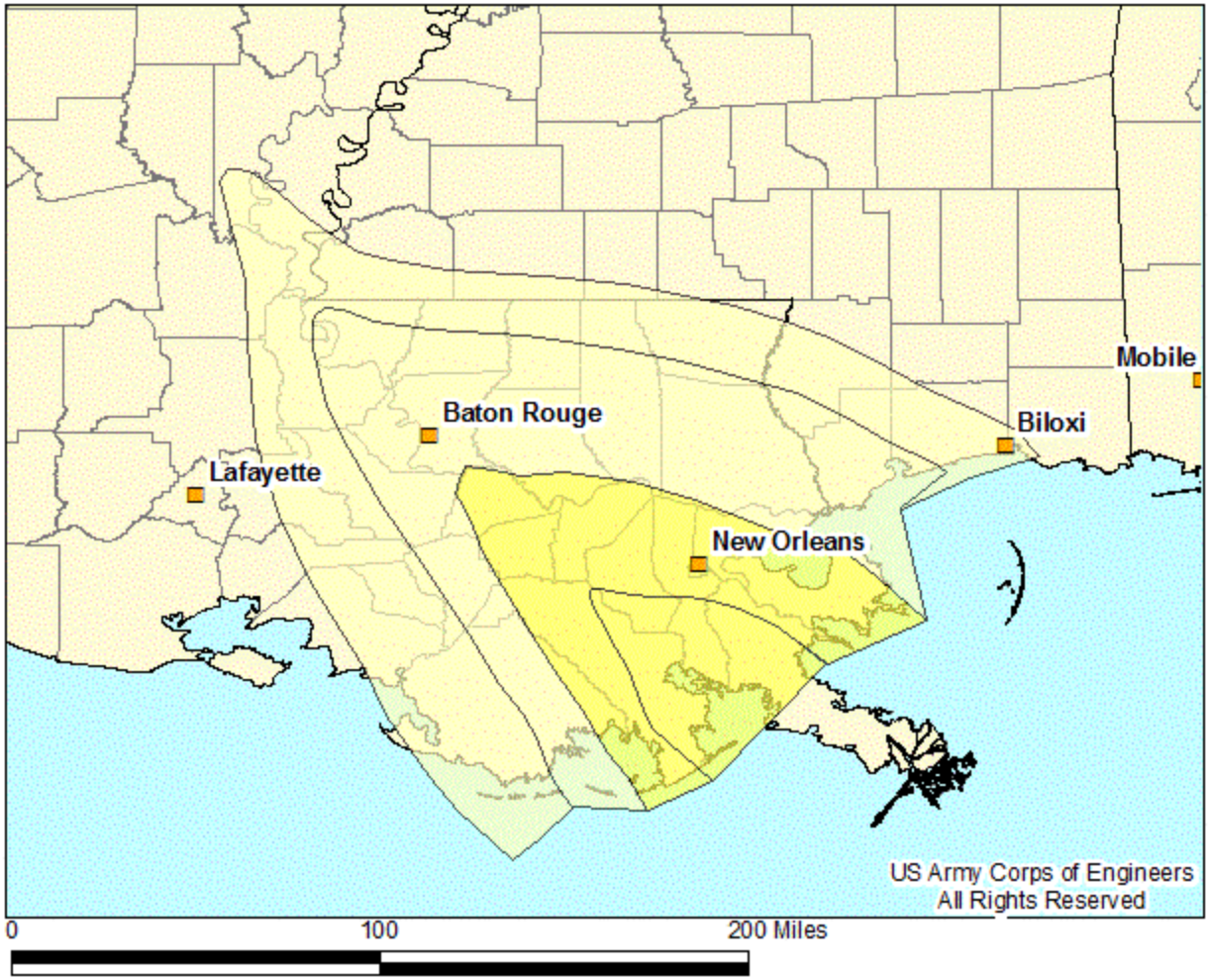
US Army Corps of Engineers

Hurricane Isaac Projected Damage Areas

Landfall Expected In About 8 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a projected or actual Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast and extrapolated by LRL staff to represent a landfall condition that has either occurred or may occur in the near future.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

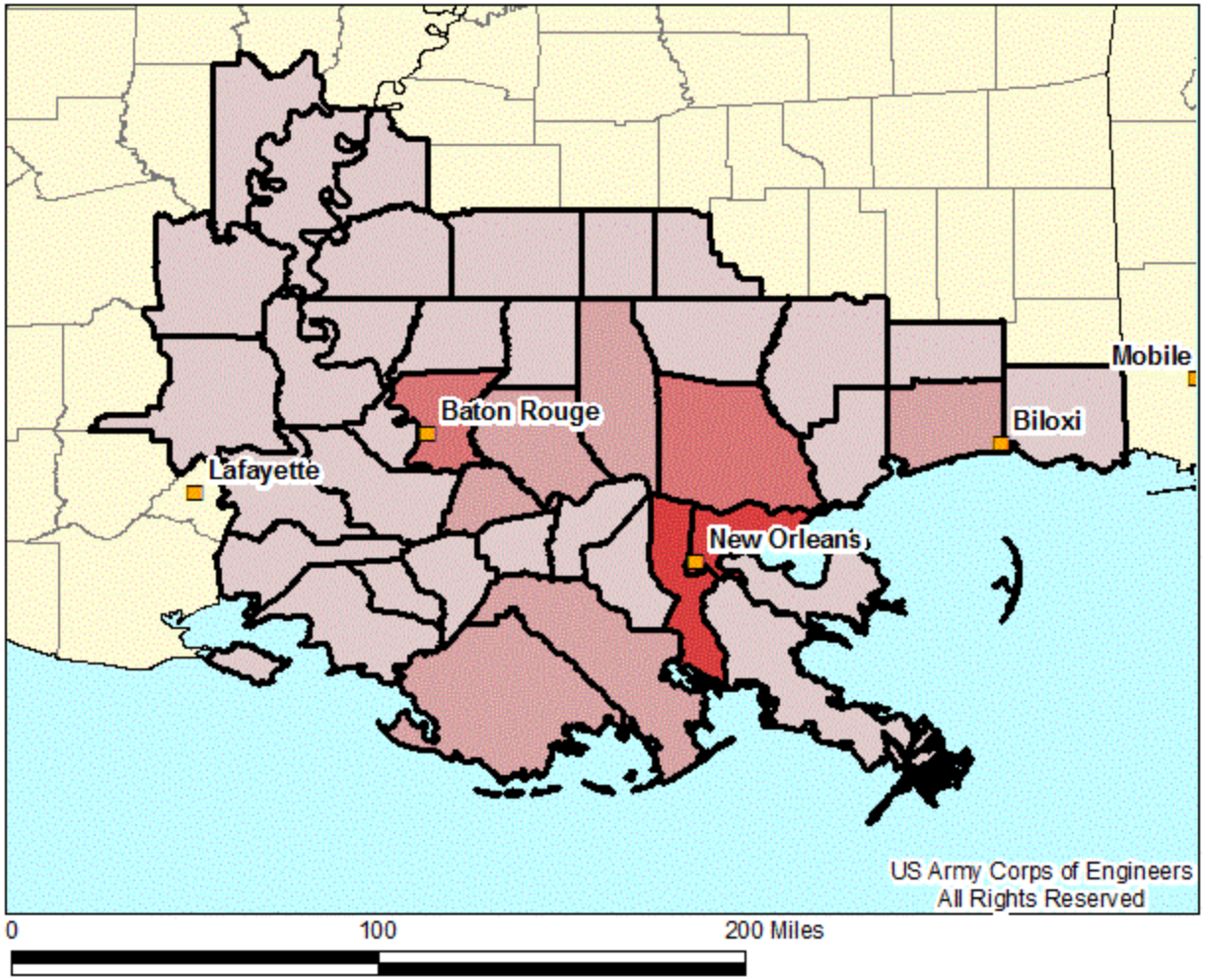
Hurricane Isaac Projected Damage Areas	
Generated By: Siemsen, LRL 1730 EDT 08/28/2012	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 18

US Army Corps of Engineers

Hurricane Isaac Debris Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Louisiana - 3,763,000 Yards
Mississippi - 398,000 Yards

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Debris Model	
Generated By: Siemsen, LRL 1730 EDT 08/28/2012	
Sources: HURREVAC LRL-DEBRIS	Page 2 of 18

US Army Corps of Engineers

Hurricane Isaac Debris Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Louisiana		Ascension Parish	172,000
		Assumption Parish	25,000
		Avoyelles Parish	3,000
		Catahoula Parish	2,000
		Concordia Parish	2,000
		East Baton Rouge Parish	480,000
		East Feliciana Parish	20,000
		Iberia Parish	6,000
		Iberville Parish	31,000
		Jefferson Parish	814,000
		Lafourche Parish	244,000
		Livingston Parish	177,000
		Orleans Parish	677,000
		Plaquemines Parish	41,000
		Pointe Coupee Parish	26,000
		St. Bernard Parish	84,000
		St. Charles Parish	95,000
		St. Helena Parish	15,000
		St. James Parish	34,000
		St. John the Baptist Pari	74,000
		St. Landry Parish	3,000
		St. Martin Parish	7,000
		St. Mary Parish	39,000
		St. Tammany Parish	289,000
		Tangipahoa Parish	143,000
		Terrebonne Parish	184,000
		Washington Parish	35,000
		West Baton Rouge Parish	27,000
		West Feliciana Parish	14,000
Louisiana	3,763,000		

State	Yards per State	County	Yards per County
Mississippi		Adams County	12,000
		Amite County	13,000
		Hancock County	64,000
		Harrison County	141,000
		Jackson County	40,000
		Pearl River County	56,000
		Pike County	12,000
		Stone County	11,000
		Walthall County	23,000
		Wilkinson County	26,000
Mississippi	398,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Debris Model

Generated By:
Siemsen, LRL 1730 EDT 08/28/2012

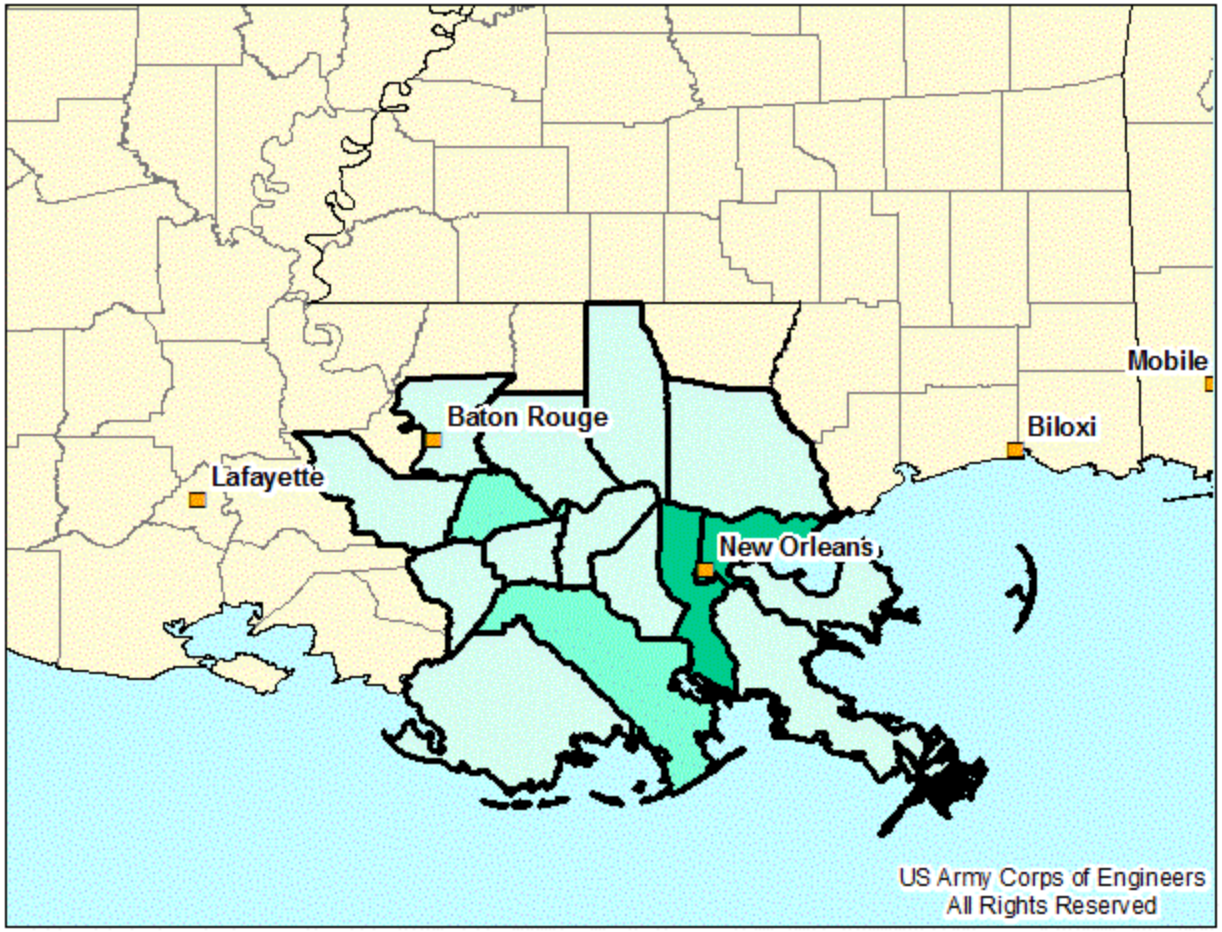
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Commodities Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!



0 100 200 Miles

Post Landfall Water Model Results

Day One / Day Two / Day Three
Louisiana – 16/33/66 Truckloads

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC ***(1700 EDT 08/28/2012)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents daily needs with a ramp-up in the distribution system – three days for Points of Distribution (PODs) to be fully in place and operational. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Commodities Model	
Generated By: Siemsen, LRL 1730 EDT 08/28/2012	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 18

US Army Corps of Engineers

Hurricane Isaac Commodities Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Louisiana		Ascension Parish	6
		Assumption Parish	1
		East Baton Rouge Parish	1
		Iberville Parish	1
		Jefferson Parish	18
		Lafourche Parish	5
		Livingston Parish	1
		Orleans Parish	16
		Plaquemines Parish	1
		St. Bernard Parish	3
		St. Charles Parish	4
		St. James Parish	2
		St. John the Baptist Pari	3
		St. Tammany Parish	1
		Tangipahoa Parish	1
		Terrebonne Parish	2
Louisiana	66		

Source: US Army Corps of Engineers, All Rights Reserved

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested daily needs based on full deployment of a commodities distribution system. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Commodities Model

Generated By:
Siemsen, LRL 1730 EDT 08/28/2012

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Temporary Roofing Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

0 100 200 Miles

Post Landfall Temporary Roofing Model Results

Louisiana - 10,000

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast. Temporary roofing is based on 3% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Roofing Model	
Generated By: Siemsen, LRL 1730 EDT 08/28/2012	
Sources: HURREVAC LRL-DEBRIS	Page 6 of 18

US Army Corps of Engineers

Hurricane Isaac Temporary Roofing Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Ascension Parish	800
		Assumption Parish	< 100
		East Baton Rouge Parish	< 100
		Iberville Parish	< 100
		Jefferson Parish	3,500
		Lafourche Parish	700
		Livingston Parish	< 100
		Orleans Parish	2,700
		Plaquemines Parish	200
		St. Bernard Parish	400
		St. Charles Parish	600
		St. James Parish	300
		St. John the Baptist Pari	500
		St. Tammany Parish	< 100
		Tangipahoa Parish	< 100
		Terrebonne Parish	300
Louisiana	10,000		

Temporary roofing is based on 3% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Roofing Model

Generated By:
Siemsen, LRL 1730 EDT 08/28/2012

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Temporary Housing Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

0 100 200 Miles

Post Landfall Temporary Housing Model Results

No Temporary Housing need expected

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast. Temporary housing is based on nothing. The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Housing Model	
Generated By: Siemsen, LRL 1730 EDT 08/28/2012	
Sources: HURREVAC LRL-DEBRIS	Page 8 of 18

US Army Corps of Engineers

Hurricane Isaac Temporary Housing Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County

Temporary housing is based on nothing.
The number indicated represents a possible need but not necessarily the scope of mission for USACE.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Housing Model

Generated By:
Siemsen, LRL 1730 EDT 08/28/2012

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Population Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

Post Landfall Population Model Results

Louisiana - 1,185,000

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2010 values adjusted to July 2011 values).

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Population Model	
Generated By: Siemsen, LRL 1730 EDT 08/28/2012	
Sources: HURREVAC LRL-DEBRIS	Page 10 of 18

US Army Corps of Engineers

Hurricane Isaac Population Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Louisiana		Ascension Parish	96,000
		Assumption Parish	< 1,000
		East Baton Rouge Parish	< 1,000
		Iberville Parish	< 1,000
		Jefferson Parish	433,000
		Lafourche Parish	79,000
		Livingston Parish	7,000
		Orleans Parish	361,000
		Plaquemines Parish	14,000
		St. Bernard Parish	40,000
		St. Charles Parish	53,000
		St. James Parish	22,000
		St. John the Baptist Pari	45,000
		St. Tammany Parish	< 1,000
		Tangipahoa Parish	< 1,000
		Terrebonne Parish	35,000
Louisiana	1,185,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2010 values adjusted to July 2011 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Isaac Population Model

Generated By:
Siemsen, LRL 1730 EDT 08/28/2012

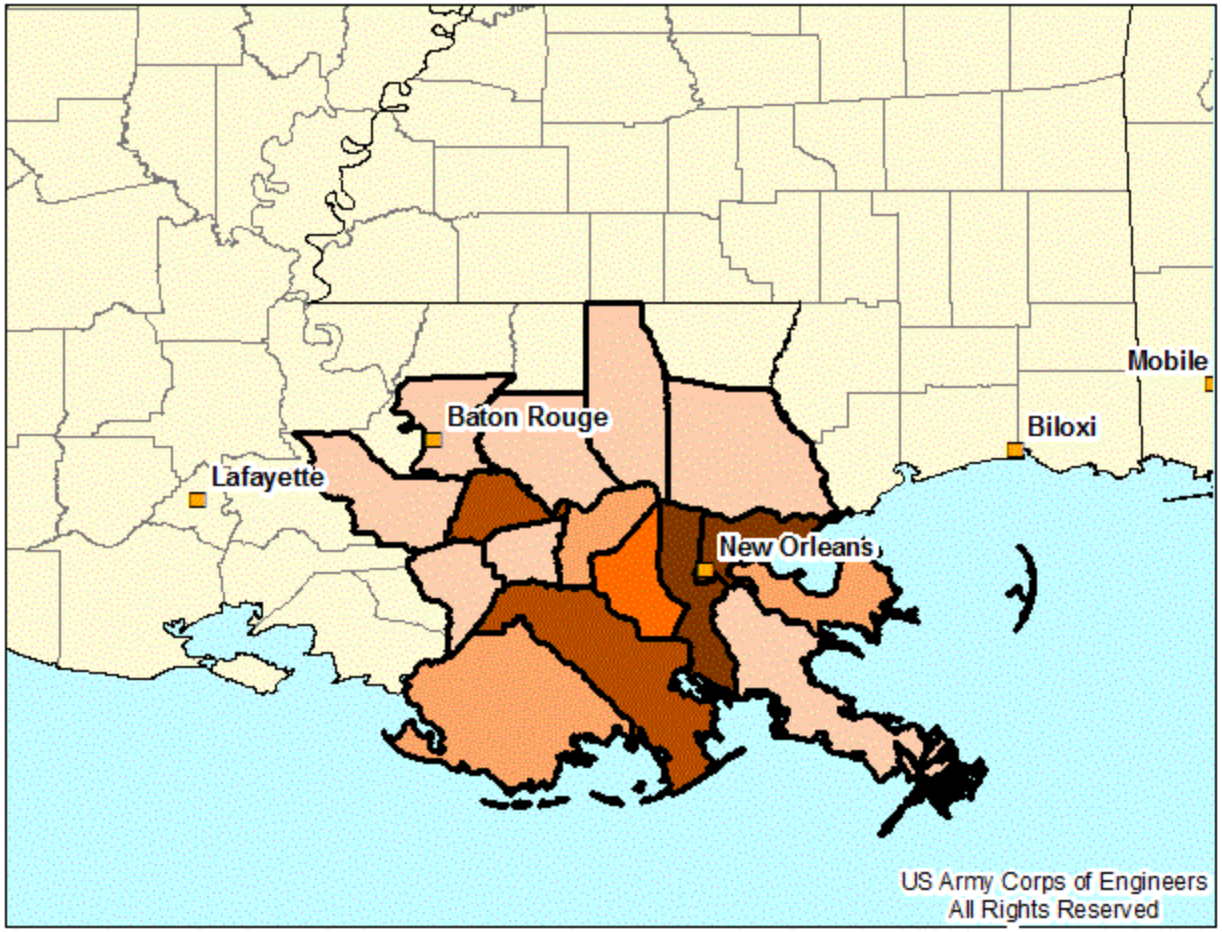
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Households Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!



0 100 200 Miles

Post Landfall Households Model Results

Louisiana - 447,000

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2010 values adjusted to July 2011 values).

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Households Model	
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Sources: HURREVAC LRL-DEBRIS	Page 12 of 18

US Army Corps of Engineers

Hurricane Isaac Households Model

Landfall Expected In About 8 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Louisiana		Ascension Parish	34,000
		Assumption Parish	< 1,000
		East Baton Rouge Parish	< 1,000
		Iberville Parish	< 1,000
		Jefferson Parish	168,000
		Lafourche Parish	28,000
		Livingston Parish	3,000
		Orleans Parish	141,000
		Plaquemines Parish	5,000
		St. Bernard Parish	15,000
		St. Charles Parish	18,000
		St. James Parish	8,000
		St. John the Baptist Pari	15,000
		St. Tammany Parish	< 1,000
		Tangipahoa Parish	< 1,000
		Terrebonne Parish	12,000
Louisiana	447,000		

The number of households estimated to be within the hurricane force winds comes from Census 2010 values adjusted to July 2011 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Isaac Households Model

Generated By:
Siemsen, LRL 1730 EDT 08/28/2012

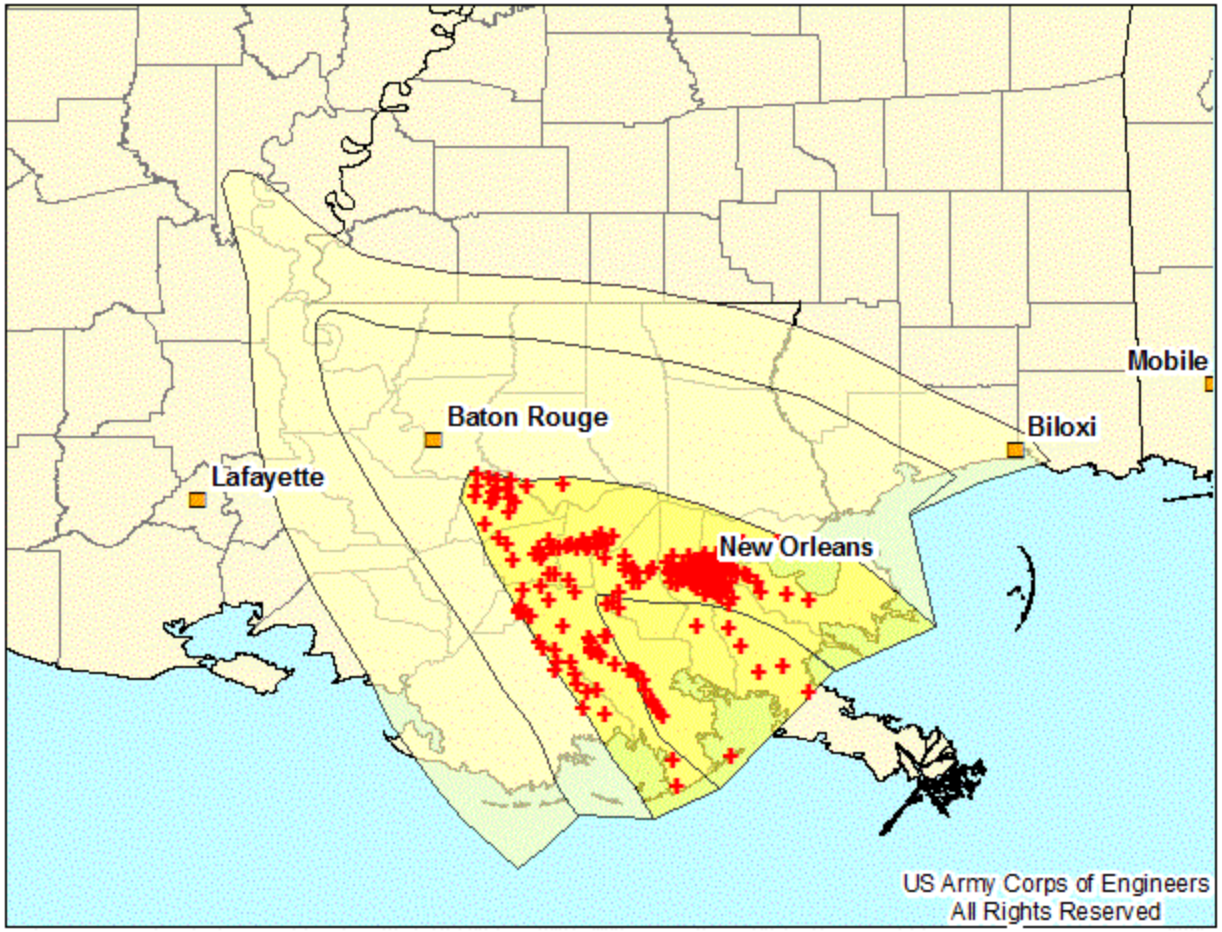
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Isaac Fire Stations

Landfall Expected In About 8 Hours

For Planning Purposes Only!



0 100 200 Miles

+ Fire Stations

Most Probable Landfall Fire Stations Inside Hurricane Force Winds

Louisiana - 194

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast.
The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Fire Stations	
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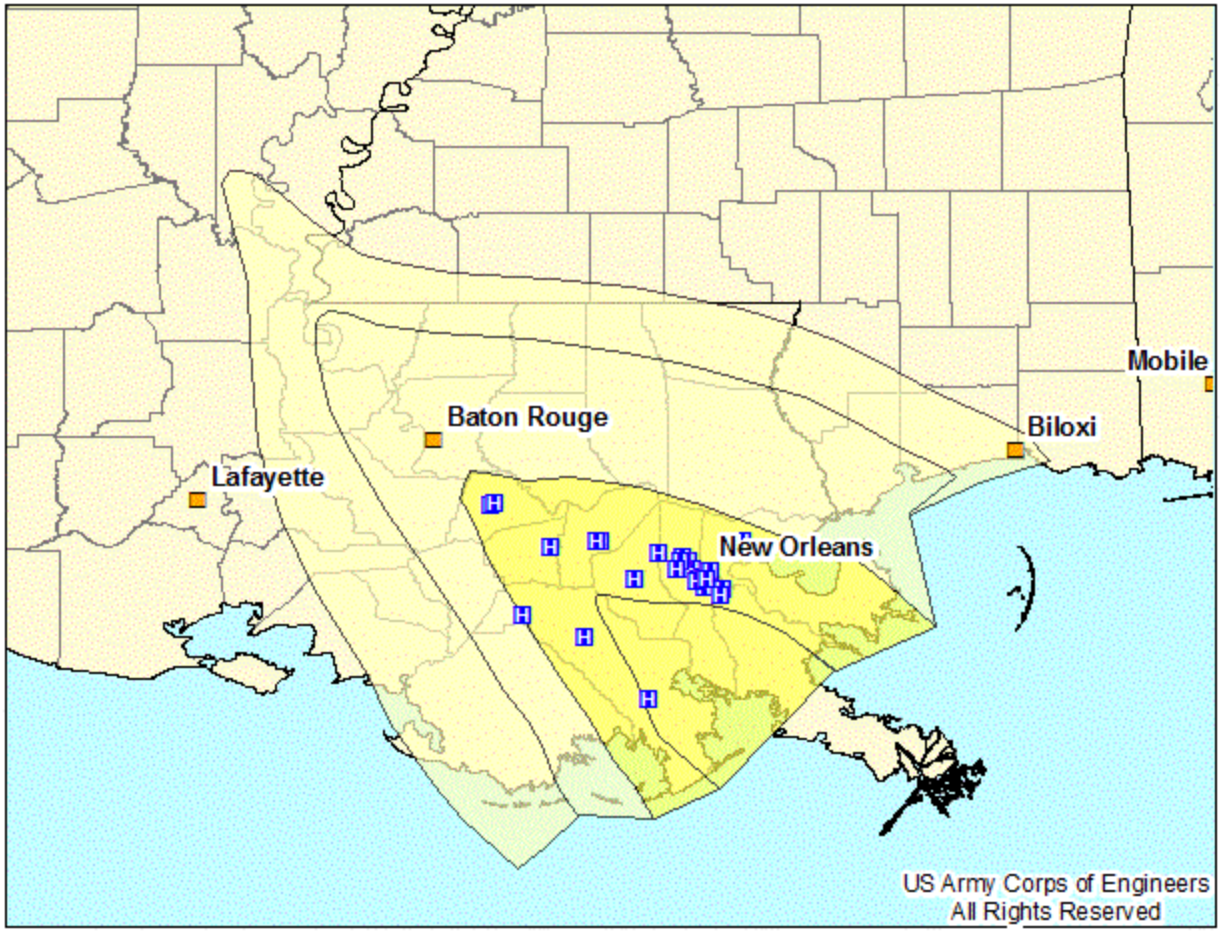
Sources: HURREVAC LRL-DEBRIS	Page 14 of 18

US Army Corps of Engineers

Hurricane Isaac Hospitals

Landfall Expected In About 8 Hours

For Planning Purposes Only!



0 100 200 Miles

H Hospitals

Most Probable Landfall Hospitals Inside Hurricane Force Winds

Louisiana - 35

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast.
The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane Isaac Hospitals	
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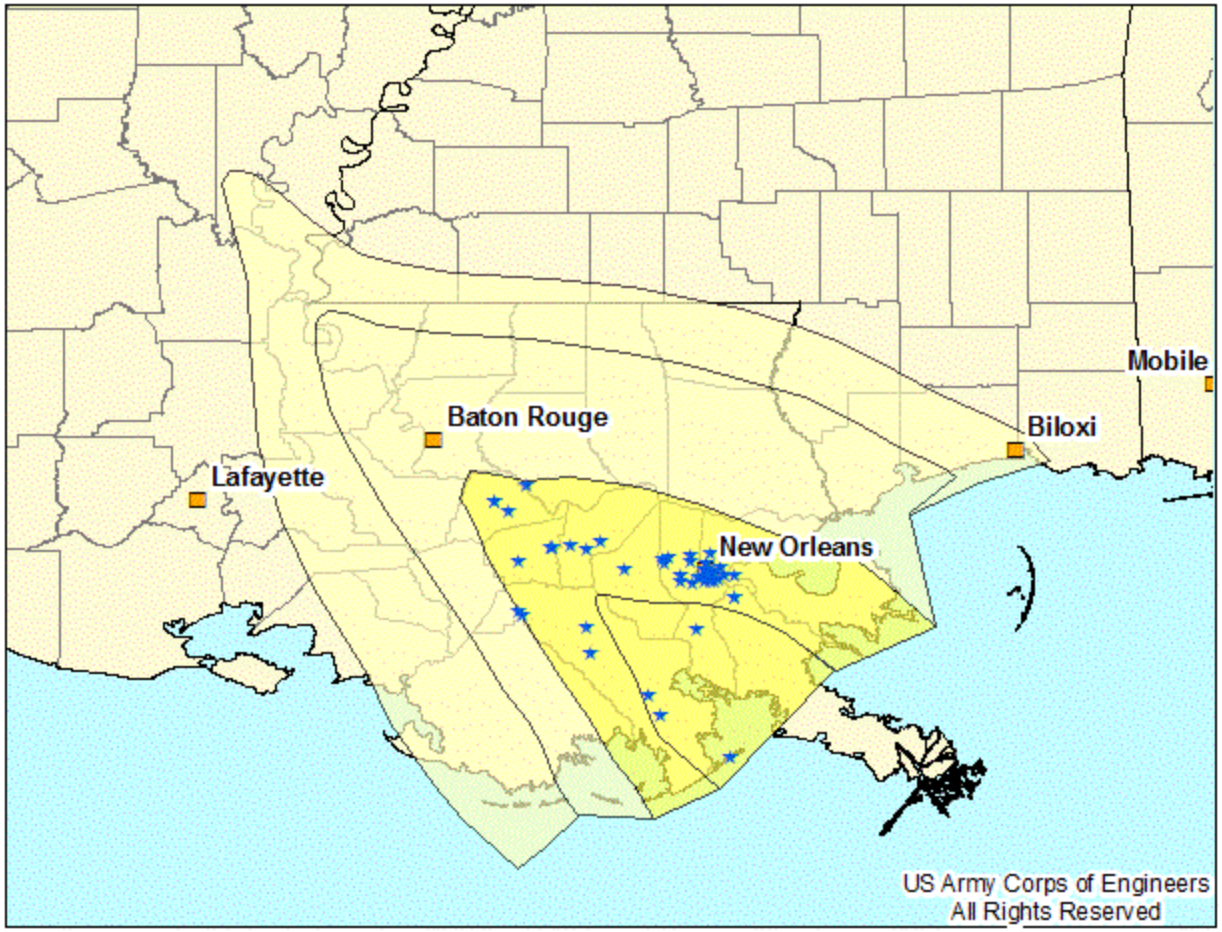
Sources: HURREVAC LRL-DEBRIS	Page 15 of 18

US Army Corps of Engineers

Hurricane Isaac Law Enforcement

Landfall Expected In About 8 Hours

For Planning Purposes Only!



0 100 200 Miles

★ Law Enforcement

Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

Louisiana - 52

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast.
The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Law Enforcement	
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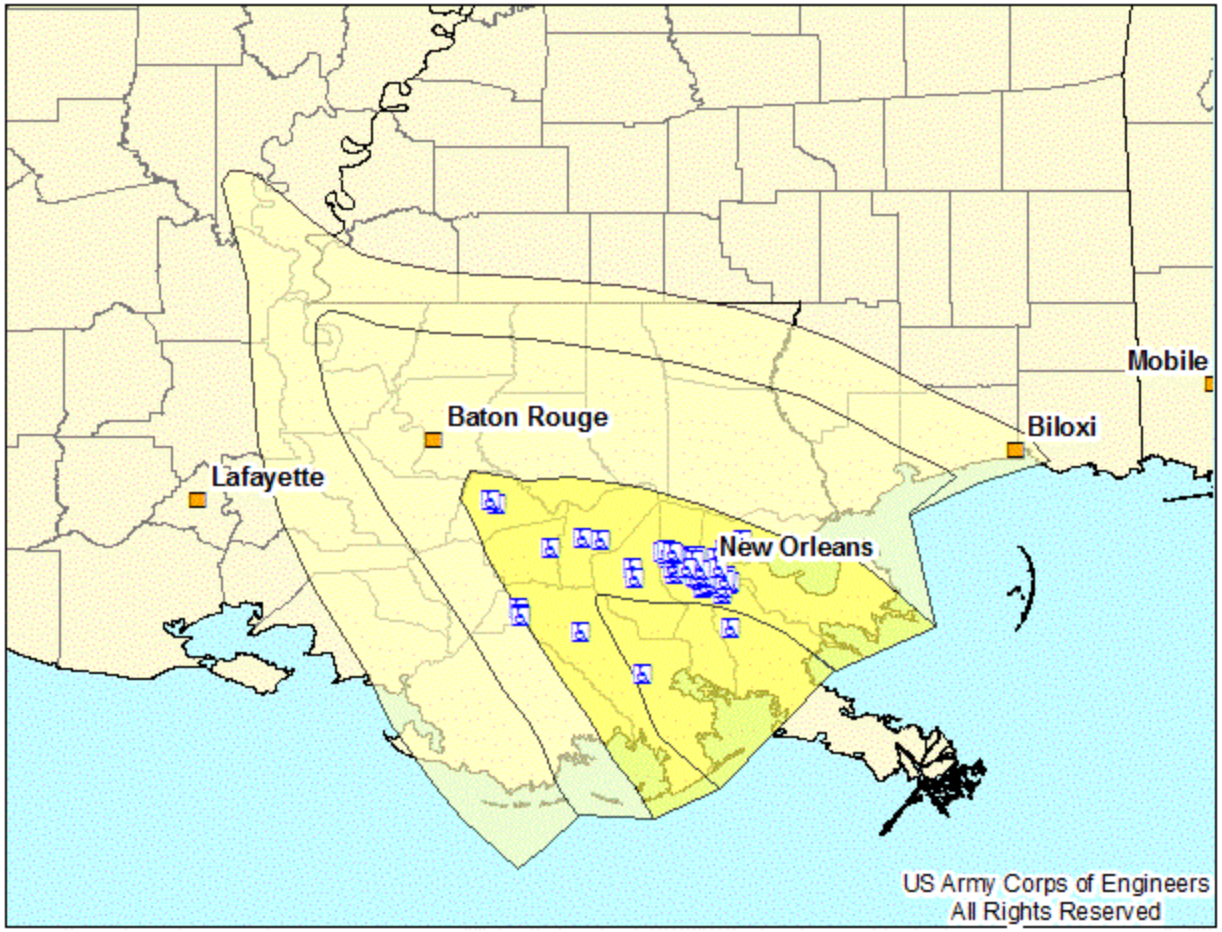
Sources: HURREVAC LRL-DEBRIS	Page 16 of 18

US Army Corps of Engineers

Hurricane Isaac Nursing Homes

Landfall Expected In About 8 Hours

For Planning Purposes Only!



0 100 200 Miles

Nursing Homes

Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

Louisiana - 67

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast.
The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Nursing Homes	
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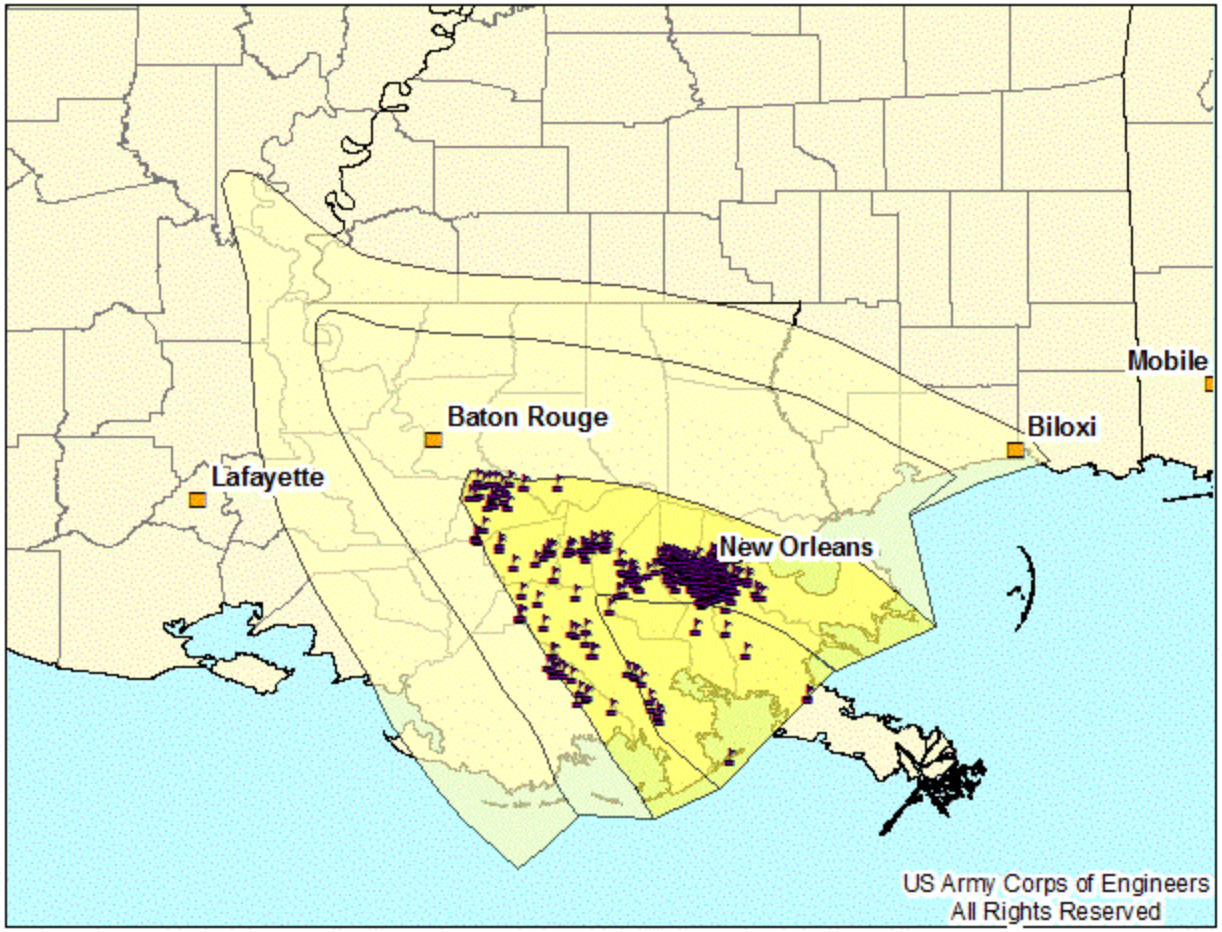
Sources: HURREVAC LRL-DEBRIS	Page 17 of 18

US Army Corps of Engineers

Hurricane Isaac Schools

Landfall Expected In About 8 Hours

For Planning Purposes Only!



0 100 200 Miles

Schools

Most Probable Landfall Schools Inside Hurricane Force Winds

Louisiana - 358

Model results per County on following page

This model is based on a Category 1 storm making landfall west of Mississippi River Delta.

Information provided on this page displays a Category 1 storm making landfall west of Mississippi River Delta. These projections are based on information from the NHC (1700 EDT 08/28/2012) forecast.
The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2012).

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Isaac Schools	
Generated By: Siemsen, LRL 1730 EDT 08/28/2012	
Sources: HURREVAC LRL-DEBRIS	Page 18 of 18